

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/007118 A2**

(51) International Patent Classification<sup>7</sup>:

A61K

(21) International Application Number:

PCT/US2004/023075

(22) International Filing Date: 19 July 2004 (19.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/488,097 18 July 2003 (18.07.2003) US

(71) Applicant (for all designated States except US): REGENEREX BIOPHARMACEUTICALS, INC. [US/US]; 3 Bethesda Metro Center, Suite 700, Bethesda, Maryland 20814 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GOLDSTEIN, Allan, L. [US/US]; 800 25th Street, N.W., Apartment 1005, Washington, District of Columbia 20037 (US).

(74) Agents: REPPER, George, R. et al.; 1425 K Street, N.W., Suite 800, Washington, District of Columbia 20005 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/007118 A2

(54) Title: TREATMENT OR PREVENTION OF DAMAGE DUE TO RADIATION EXPOSURE

(57) Abstract: A method of treatment or prevention of damage due to ionizing radiation exposure involves administering to a subject in need of such treatment an effective amount of a composition containing 1) a compound including a radiation damage-inhibiting polypeptide containing amino acid sequence LKKTET (such as Thymosin  $\beta$ 4), a conservative variant of LKKTET, an actin-sequestering agent, an anti-inflammatory agent; 2) an agent which stimulates production of the compound in the subject; 3) an agent which regulates the compound in the subject; or 4) an antagonist of the compound, so as to inhibit radiation damage in the subject.